

## CHAPTER FIVE

### ANALYSIS OF DATA AND INTERPRETATION OF RESULTS

#### Coefficient of Stability and Index of Reliability of the Q-set

Prior to the collection of data from 38 persons the Q-sort items finalised in consultation with a committee of judges were administered on eight individuals. These persons were all College teachers or research fellows who were either pursuing or had completed some research work. The same Q-set was once again administered on them, the interval range being 12 to 63 days. The average interval was 50 days. The data collected from them is reported in

Table No. 1. The co-efficient of test-retest reliability for each one of them was computed by the following formula, viz. :

$$r_{tt} = \frac{\sum xy - \frac{(\sum x)(\sum y)}{N}}{\sqrt{\left[ \sum x^2 - \frac{(\sum x)^2}{N} \right] \left[ \sum y^2 - \frac{(\sum y)^2}{N} \right]}}$$

Similarly, the index of reliability was calculated in each case by the following formula, viz. :

$$r_{too} = \sqrt{r_{tt}}$$

Where  $r_{too}$  is the index of reliability and  $r_{tt}$  the co-efficient of reliability.

TABLE No. 1

Q- Data collected from 9 College Teachers and Research Scholars  
for Administration of the Q-set Twice

Atre : $X_1$	5	5	6	4	4	10	8	7	5	6	5	3	1	5	3	1	5	3	1	8	7	2	4	6	3	6	3	
	2	4	6	9	6	3	7	1	0	4	4	6	8	7	4	2	8	7	2	5	5	7	4	6	5	5	4	3
	4	9	6	6	6	6	4	5	3	2	3	8	9	6	8	6	8	4	6	2	5	10	7	7	7	7	7	8
	5	3	4	5	3	3	5	3	5	0	0	9	4	5	4	0	6	4	7	2	2	2	9	4	4	8	7	5
$Y_1$	3	3	6	5	5	5	7	8	7	6	5	4	6	4	2	5	4	4	4	9	4	4	4	3	3	3	3	6
	4	8	5	5	1	7	4	6	0	2	4	6	2	8	7	9	8	7	8	4	10	4	4	6	6	6	4	8
	3	9	6	4	4	3	2	5	4	3	2	7	3	7	6	7	7	7	6	7	8	5	5	2	2	5	4	6
	3	5	1	6	3	3	5	2	5	0	0	7	5	0	5	6	5	5	6	5	1	9	4	6	6	6	8	6
Barde: $X_2$	8	8	5	7	5	5	7	8	3	6	3	3	6	3	2	3	3	4	4	5	7	1	4	4	6	6	6	6
	6	7	8	6	4	9	2	5	5	5	2	4	5	8	2	4	4	4	2	2	6	3	7	7	5	5	5	5
	4	9	4	3	9	6	0	6	4	4	4	3	4	6	6	3	8	8	4	10	6	4	4	5	3	3	3	3
	5	3	5	9	6	6	5	1	6	4	2	7	4	1	2	2	5	2	2	4	7	1	3	4	6	9	9	9







Y <sub>8</sub>		Gopinath+X <sub>9</sub>		Y <sub>9</sub>	
4	4	3	7	3	6
9	1	9	2	7	2
3	8	1	7	2	8
4	3	6	1	5	1
		5	6	7	6
		5	5	3	7
		3	8	0	0
		6	6	5	6
		8	5	9	0
		5	4	4	3
		5	5	7	5
		7	4	10	3
		6	8	9	5
		6	6	5	8
		1	2	4	4
		5	5	2	3
		7	3	6	6
		3	4	1	5
		2	6	7	3
		3	4	5	8
		4	9	7	5
		4	7	1	7
		5	5	7	6
		0	7	3	7
		5	7	6	4
		4	8	1	6
		4	5	3	6
		0	5	4	9
		3	6	4	4
		3	4	4	9
		2	9	7	8
		3	4	5	7
		4	8	6	4
		4	7	4	6
		0	5	3	3
		5	7	6	10
		4	7	7	5
		8	2	8	6
		2	7	4	10
		8	7	6	2
		7	5	4	3
		6	6	3	4
		10	9	2	8
		1	3	5	9
		5	10	7	2
		8	2	8	4
		7	7	9	6
		2	3	4	3
		7	5	6	2
		6	8	4	10
		6	1	2	5
		3	3	8	6
		5	5	4	4
		4	8	8	5
		5	3	4	8
		3	5	5	5
		5	10	6	7
		7	3	3	9
		7	7	6	8
		5	4	4	6
		4	5	5	3
		4	4	8	5
		8	8	4	4
		2	5	6	4
		7	7	4	2
		6	6	9	10
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6
		3	7	9	3
		7	9	8	9
		3	3	4	6
		8	2	6	3
		2	7	4	5
		7	7	6	10
		6	6	4	2
		6	10	2	5
		1	1	8	7
		10	3	6	6
		5	7	3	3
		7	2	9	9
		2	8	4	2
		8	7	6	4
		6	6	4	6
		1	3	5	3
		6	5	7	5
		3	8	6	7
		5	4	4	5
		7	9	8	7
		5	5	4	6

The results of these calculations are given below in Table No. 2 :

TABLE No. 2

Table of Co-efficients of Stability (  $r_{tt}$  )  
and Indices of Reliability  
(  $r_{t\infty}$  ) Computed for 9  
College Teachers  
and Research  
Scholars.

Person No.	: Value of $r_{tt}$	: Corresponding Values of $r_{t\infty}$
	:	:
1	0 . 69	0 . 83
2	0 . 68	0 . 82
3	0 . 71	0 . 84
4	0 . 76	0 . 87
5	0 . 59	0 . 77
6	0 . 68	0 . 82
7	0 . 69	0 . 83
8	0 . 73	0 . 85
9	0 . 86	0 . 92

Thus it was found that the co-efficient of test-retest reliability ( co-efficient of stability ) ranged from 0.59 to 0.86 and the estimated indices of

reliability ranged from 0.77 to 0.92. These values were considered satisfactory enough. Hence no further modifications were made thereafter in the Q-set. The Q-items were then printed on small cards as detailed in Chapter IV above to have the final set of Q-items ready for administration on creative persons.

Q - Data from the Creative Persons :

Data collected from 38 persons were arranged and tabulated in the form indicated in Chapter IV above. They are reported in Tables 3 to 40 below. Data collected from 2 persons mentioned at serial numbers 2 and 3 of Appendix- I but not conforming to the forced choice distribution scheme adopted for this investigation are given separately in Table 41 and Table 42 as they are not amenable to statistical treatment in the same way as the data from the other 38 creative persons who participated in this experiment.

TABLE No. 3  
Q-sort values assigned by Prof. Narayan Shridhar Bendre

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
31	27	45	35	7	50	37	9	75	12	28
55	72	4	51	79	18	44	70	54	69	53
	30	68	20	32	78	58	13	77	26	
	64	52	57	66	43	17	46	10	39	
		71	2	40	29	47	41	3		
		56	19	21	74	22	60	11		
			38	5	61	76	59			
			73	23	49	62	25			
			16	33	6	67	14			
				63	36	15				
				24	48	1				
				42	8	65				
					80					
					34					



TABLE No. 5  
Q-sort values assigned by Shri V. Shantaram

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
57	5	2	26	33	38	44	66	62	25	4
16	51	30	79	1	41	72	29	53	12	63
	64	21	6	34	9	80	56	65	22	
	27	52	50	40	19	14	70	43	11	
		74	42	37	76	68	67	28		
		58	47	15	54	46	49	60		
			78	48	75	77	35			
			7	55	18	13	36			
			17	45	59	61	3			
				24	32	8				
				10	39	31				
				71	23	69				
					73					
					20					

**TABLE No. 6**  
**Q-sort values assigned by Prof. P. L. Deshpande**

	10	9	8	7	6	5	4	3	2	1	0
74	75	53	16	51	33	18	47	54	68	12	
40	37	64	52	1	23	13	63	26	76	69	
	59	39	32	60	56	24	71	38	28		
	31	45	11	9	46	8	10	43	44		
		70	27	20	61	65	25	66			
		30	55	41	22	49	77	72			
			80	6	78	2	15				
			50	57	48	21	36				
			58	17	42	3	4				
				35	79	14					
				7	62	5					
				29	73	34					
					67						
					19						

**TABLE No. 7**  
**Q-sort values assigned by Shri G. L. Mehta**

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
4	53	73	3	72	58	24	62	38	75	18
56	52	51	42	14	13	26	21	48	44	47
	29	1	64	39	11	36	66	15	43	
	6	59	27	54	31	10	45	28	63	
		32	33	55	30	57	76	25		
		74	23	50	16	40	49	77		
			41	70	5	71	78			
			9	35	17	60	22			
			69	79	61	68	65			
				7	46	20				
				80	34	12				
				37	8	67				
					19					
					2					

**TABLE No. 8**  
**Q-sort values assigned by Rudit Shiv Sharma**

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
57	56	67	2	6	27	72	8	43	15	38
51	42	79	34	1	41	21	30	28	66	68
	7	63	60	58	80	26	10	77	76	
	64	53	5	50	78	39	35	29	22	
		74	33	65	47	31	25	36		
		3	45	16	32	19	20	18		
			44	75	59	61	24			
			17	52	54	49	70			
			37	71	48	14	9			
				55	4	12				
				23	11	13				
				73	40	69				
				62						
				46						

TABLE No. 9  
Q-sort values assigned by Shri Lacchu Maharaj

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
55	57	63	3	4	23	67	74	61	54	69
20	42	52	49	39	40	50	36	43	12	72
	45	37	10	79	7	6	14	70	77	
	47	56	38	1	62	64	13	59	60	
		8	15	19	16	78	66	22		
		25	58	17	27	44	41	53		
			80	9	5	2	76			
			31	48	75	46	29			
			68	33	34	18	73			
				32	71	26				
				11	21	51				
				28	30	65				
					24					
					35					

TABLE No. 10  
Q-sort values assigned by Shri Balraj Sahni

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
74	35	65	72	27	36	24	69	25	38	21
8	30	7	1	41	49	12	53	29	68	26
	51	70	37	78	62	23	33	43	48	
	57	67	4	6	13	58	31	60	76	
		17	32	52	56	20	42	22		
		50	59	16	75	39	44	10		
			61	18	28	54	45			
			71	3	80	55	66			
			11	64	79	73	5			
				40	47	63				
				14	19	46				
				15	2	34				
					77					
					9					

TABLE No. 11  
 Q-sort values assigned by Mrs. Leela S. Moolgaonkar

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
21	27	47	37	66	5	44	34	48	59	10
4	75	78	52	79	15	68	25	41	11	74
	55	23	30	56	53	46	72	28	36	
	57	51	45	39	54	76	70	60	40	
		33	24	6	69	12	77	20		
		42	64	18	65	14	29	19		
			58	71	26	31	63			
			2	43	7	8	49			
			32	9	3	50	13			
				22	61	1				
				16	35	38				
				80	67	17				
					62					
					73					

TABLE No. 12  
Q-sort values assigned by Shri K. A. Abbas

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
2	74	78	53	30	5	22	48	72	28	26
35	60	16	55	9	79	25	46	77	12	21
6	33	43	65	61	63	80	44	49	41	
	27	59	37	64	13	31	39	62	76	
		45	75	52	15	69	4	40		
		34	47	3	50	24	18	71		
			29	7	54	67	70			
			32	14	38	10	20			
			8	17	11	1	19			
				42	73	51				
				57	23	2				
				36	68	56				
				66	66					
				58	58					

TABLE No. 13  
Q-sort values assigned by Dr. Suresh H. Joshi, Short-Story Writer (Gujarati)

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
64	45	78	57	72	80	79	67	77	68	66
8	42	76	51	65	75	73	60	63	28	26
	32	31	49	59	74	62	56	61	25	
	16	23	35	55	70	48	54	43	4	
		20	27	52	69	41	53	38		
		2	19	50	71	37	36	12		
			17	47	58	29	34			
			9	44	46	22	15			
			7	40	39	21	11			
				33	30	18				
				14	24	5				
				13	10	3				
					6					
					1					

**TABLE No. 14**  
**Q-sort values assigned by Prof. K. G. Subramanyam, Dean, Faculty**  
**of Fine Arts, M. S. University**

	10	9	8	7	6	5	4	3	2	1	0
71	40	75	64	30	20	68	44	10	77	66	
19	7	65	1	27	17	13	34	74	25	43	
	8	4	47	35	63	6	53	22	56		
	42	45	73	58	57	33	46	12	28		
		59	37	78	5	3	18	54			
		2	80	29	14	60	67	36			
			31	76	16	41	49				
			15	50	39	26	11				
			32	52	70	61	62				
				23	38	21					
				55	48	72					
				51	79	69					
				24							
				9							

TABLE No. 15  
Q-sort values assigned by Dr. V.V. Mirashi

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
42	23	51	32	67	41	9	77	38	19	54
5	7	16	48	69	3	80	15	10	61	35
	6	57	2	12	31	74	8	50	13	
	44	47	21	36	73	66	20	59	63	
		45	58	18	52	43	70	34		
		71	64	4	40	29	26	39		
			27	53	33	14	46			
			75	78	55	49	72			
			76	65	17	22	68			
				11	1	25				
				79	56	62				
				60	37	24				
					28					
					30					

TABLE No. 16  
Q-sort values assigned by Dr. V. B. Kolte

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
47	16	57	27	8	7	34	13	37	25	54
23	64	44	78	1	2	12	31	9	21	74
	24	33	56	67	39	18	77	40	26	
	45	5	58	62	6	11	72	17	28	
		35	49	53	19	61	15	63		
		71	51	52	79	65	38	22		
			60	75	73	68	3			
			32	30	76	69	43			
			14	29	59	20	66			
				46	55	10				
				48	41	80				
				42	50	4				
				36	70					
				70						

TABLE No. 17  
Q-sort values assigned by Dr. M. C. Nath

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
78	42	30	27	23	38	63	77	9	28	44
16	58	19	8	11	34	72	31	60	54	74
	33	79	6	68	39	76	13	46	14	
	26	21	37	59	55	1	22	52	25	
		35	7	75	56	24	67	62		
		57	66	48	47	3	53	70		
			17	51	71	43	29			
			40	32	20	12	49			
			45	5	10	18	15			
				73	80	61				
				64	4	65				
				50	2	69				
					36					
					41					

**TABLE No. 18**  
**Q-sort values assigned by Shri Suresh Bhat**

	10	9	8	7	6	5	4	3	2	1	0
2	4	4	6	9	12	14	12	9	6	4	2
6	5	7	55	32	31	58	2	67	28	54	
35	59	52	46	27	33	61	22	72	60	71	
	68	44	30	50	19	24	11	1	77		
	36	29	45	70	42	23	48	3	41		
		49	66	17	79	13	37	12			
		63	57	78	40	76	21	10			
			16	65	26	14	73				
			64	15	53	43	9				
			74	69	62	18	25				
				47	39	38					
				75	34	20					
				51	4	80					
					8						
					56						

TABLE No. 19  
Q-sort values assigned by Dr. S. G. Patwardhan

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
21	45	19	14	20	29	59	71	73	11	15
26	35	23	50	58	28	54	70	79	10	22
	33	13	55	34	25	52	69	75	6	
	53	9	57	80	18	49	68	77	3	
		47	76	56	24	44	67	74		
		51	7	42	17	43	66	72		
			4	27	12	41	63			
			2	1	39	40	62			
			8	30	65	38	61			
				46	78	37				
				48	32	36				
				60	16	31				
					5					
					64					

TABLE No. 20  
Q-sort values assigned by Shri Yeshwant Dinkar Pendharkar

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
7	39	30	21	57	52	72	13	38	11	77
45	35	27	4	69	70	73	14	60	12	46
	48	68	64	22	9	75	15	54	53	
	37	6	55	50	23	43	25	29	8	
		71	16	59	67	80	17	28		
		63	5	56	49	40	31	74		
			18	1	10	61	79			
			76	2	36	42	44			
			33	3	51	34	62			
				26	32	41				
				24	78	19				
				65	47	20				
					66					
					58					

**TABLE No. 21**  
**Q-sort values assigned by Dr. R. N. Dandekar**

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
21	32	76	79	60	64	62	46	52	28	49
42	56	8	45	37	27	13	20	69	77	12
	30	53	35	29	74	31	44	73	65	
	57	34	41	59	33	70	36	67	18	
		58	51	11	5	15	54	1		
		4	43	23	39	61	3	22		
			10	48	26	72	50			
			7	75	2	78	80			
			6	38	55	25	47			
				66	9	24				
				71	16	17				
				68	19	14				
					40					
					63					

**TABLE No. 22**  
**Q-sort values assigned by Shri R. J. Deotale**

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
21	71	55	30	25	6	61	28	3	46	29
7	4	37	66	17	73	8	77	70	11	74
	2	32	51	31	41	53	13	36	38	
	59	19	52	75	80	12	14	69	10	
		34	45	42	40	24	72	15		
		43	39	49	20	67	62	18		
			5	64	9	58	44			
			65	78	60	35	54			
			1	47	48	68	63			
				57	27	76				
				50	16	79				
				56	23	33				
					26					
					22					

TABLE No. 23  
Q-sort values assigned by Shri Kanu Desai

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
2	20	32	6	71	67	38	35	28	76	15
21	30	50	54	69	14	9	25	18	4	59
5	55	37	51	52	39	44	73	43	49	
	26	27	72	75	36	80	65	11	12	
		16	33	13	19	2	40	77		
		45	17	58	66	10	74	29		
			64	23	56	31	70			
			22	53	3	79	61			
			57	68	24	62	46			
			47	7	7	8				
			34	42	41	41				
			1	63	60	60				
				78						
				48						

TABLE No. 24  
Q-sort values assigned by Prof. S. B. Palsikar

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
23	67	51	11	52	21	10	77	37	43	49
71	45	5	6	44	16	63	74	75	40	41
	33	64	15	35	78	50	55	2	38	
	47	70	8	69	48	22	4	31	68	
		62	58	61	59	80	72	36		
		79	56	73	32	65	1	66		
			42	3	24	26	28			
			54	14	30	18	34			
			9	57	13	12	19			
				76	53	17				
				7	39	20				
				27	46	25				
					60					
					29					

TABLE No. 25  
Q-sort values assigned by Dr. Salim All

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
23	42	55	8	22	65	19	12	54	69	66
6	63	56	1	24	62	17	14	25	77	72
	27	57	32	30	61	28	3	60	29	
	51	59	34	35	45	43	5	49	26	
		48	80	52	36	70	10	47		
		15	78	79	37	68	18	11		
			9	7	38	20	44			
			41	76	40	21	71			
			73	75	16	13	67			
				74	4	39				
				58	46	31				
				2	50	33				
					64					
					53					

TABLE No. 26  
Q-sort values assigned by Smt. Sitara Devi

	10	9	8	7	6	5	4	3	2	1	0
2	4	6	9	12	14	12	9	6	4	2	2
71	55	57	13	53	4	24	35	67	8	74	
62	20	11	7	5	3	69	44	66	80	19	
	22	45	50	27	34	14	29	12	31		
	56	43	6	73	18	54	60	10	65		
		33	26	21	77	15	40	63			
		17	59	9	58	48	72	78			
			32	37	42	61	52				
			76	46	51	49	79				
			39	36	75	1	41				
				30	16	70					
				23	47	28					
				2	38	25					
					64						
					68						

TABLE No. 27  
 Q-sort values assigned by Shri Kantilal B. Kapadia, Sculptor, Baroda

	10	9	8	7	6	5	4	3	2	1	0
2	4	4	6	9	12	14	12	9	6	4	2
57	78	64	58	80	79	68	66	59	74	77	
4	56	51	52	76	75	63	44	46	65	54	
	26	37	40	73	71	60	42	31	43		
	23	32	39	72	70	55	38	25	8		
		21	29	67	69	50	36	22			
		16	15	61	62	45	20	12			
			11	48	53	35	14				
			5	47	49	34	13				
			3	41	33	19	10				
				28	30	17					
				24	27	7					
				18	9	6					
				2							
				1							

**TABLE No. 28**  
**Q-sort values assigned by Shri Jyoti Manshankar Bhatt, Reader in Painting,**  
**M. S. University**

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
9	75	59	79	80	78	76	69	74	77	26
5	64	58	71	70	72	73	56	63	67	22
	42	47	57	66	68	65	53	48	38	
	40	32	45	61	62	52	43	14	21	
		7	24	60	54	51	36	4		
		6	23	55	44	50	35	3		
			20	41	39	49	29			
			8	37	34	46	13			
			2	18	33	28	10			
				17	31	27				
				16	30	12				
				11	25	1				
					19					
					15					

TABLE No. 29  
Q-sort values assigned by Dr. S. P. Varma

	10	9	8	7	6	5	4	3	2	1	0
45	27	58	64	75	42	25	56	43	13	54	
16	21	35	2	66	4	22	51	70	74	52	
	6	48	47	78	38	17	50	72	34		
	30	40	24	8	1	11	53	77	12		
		7	68	80	3	63	67	41			
		79	9	76	26	60	44	29			
			57	69	39	62	73				
			71	33	37	49	55				
			32	23	5	20	46				
				65	61	31					
				59	15	36					
				19	10	28					
					18						
					14						

**TABLE No. 30**  
**Q-sort values assigned by Bar. B. D. Khobragade**

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
60	24	71	33	32	22	9	10	74	72	40
7	51	34	16	58	68	1	37	49	19	26
	64	66	63	52	47	36	8	17	30	
	45	57	79	27	77	12	11	20	15	
		5	75	55	25	14	46	50		
		56	78	54	23	13	70	21		
			42	35	39	59	4			
			53	80	38	76	62			
			6	43	67	28	29			
				61	2	31				
				44	3	65				
				41	48	73				
					69					
					18					

TABLE No. 31  
 Q-sort values assigned by Shri Atmaram Raoji Deshpande " Anil "

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
2	16	26	38	50	61	55	60	22	66	74
7	30	72	67	68	71	18	12	14	43	11
27	37	21	6	39	62	40	33	28	54	
	57	29	24	45	13	10	34	23	15	
		4	80	79	2	20	75	70		
		76	65	52	63	73	42	1		
			77	35	44	56	41			
			59	5	9	32	3			
			8	36	47	64	31			
				58	19	25				
				48	17	78				
				46	53	51				
					49					
					69					

**TABLE No. 32**  
**Q-sort values assigned by Shri Vaman Krishna Chorghade**

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
37	35	6	59	45	44	26	60	46	54	74
17	9	2	52	23	18	61	22	53	11	69
	7	1	55	65	38	28	40	58	3	
	13	70	73	41	29	15	47	42	39	
		56	62	20	66	19	31	75		
		50	67	4	64	80	63	12		
			34	32	48	10	68			
			36	57	72	78	76			
			27	8	21	43	14			
				30	79	49				
				16	51	77				
				71	33	25				
				24	5					

TABLE No. 33  
Q-sort values assigned by Dr. P. S. Mene

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
64	57	58	79	3	35	68	73	62	43	12
16	21	60	67	40	44	2	14	11	18	77
	51	47	75	26	63	65	76	74	46	
	6	34	54	30	23	20	31	15	70	
		4	37	69	27	52	29	49		
		45	55	9	53	8	80	71		
			32	13	72	39	10			
			42	1	19	61	50			
			7	28	25	41	59			
				78	24	38				
				22	33	36				
				17	56	48				
					66					
					5					

TABLE No. 34  
Q-sort values assigned by Shri Manohar Sapre

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
64	78	57	50	42	20	40	51	52	28	48
19	59	21	58	47	10	70	49	13	2	4
	37	66	72	73	27	46	14	22	11	
	32	36	39	9	56	25	35	53	61	
		44	43	24	55	7	5	1		
		63	33	45	29	71	8	54		
			60	12	6	23	26			
			16	34	80	38	3			
			75	67	74	76	69			
				62	77	31				
				79	30	15				
				41	68	18				
					17					
					65					

**TABLE No. 35**  
**Q-sort values assigned by Shri Anant Gopal Sheorey**

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
21	6	17	16	1	3	9	8	15	18	44
57	7	19	23	2	4	10	12	36	66	33
	32	42	27	5	11	13	25	38	68	
	35	56	30	20	31	14	39	65	74	
		59	35	22	33	24	41	71		
		79	37	26	46	28	43	76		
			40	29	48	47	62			
			64	34	51	49	69			
			78	45	52	54	77			
				50	58	70				
				63	60	75				
				72	61	80				
					67					
					73					

TABLE No. 36  
 Q-sort values assigned by Dr. G. J. Mohanrao

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
2	6	7	18	4	8	1	10	26	20	25
57	21	32	27	5	9	3	11	28	29	70
	33	36	37	24	12	13	14	31	43	
	65	51	41	39	16	30	15	34	74	
		53	47	44	17	35	38	48		
		61	58	45	19	40	54	77		
			64	46	22	50	63			
			75	55	23	59	66			
			78	56	42	62	68			
				69	49	67				
				73	52	76				
				79	60	80				
					71					
					72					

TABLE No. 37  
Q-sort values assigned by Shri I. S. Johar

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
44	14	34	7	24	6	3	11	2	1	4
74	48	47	8	25	13	5	15	12	28	21
	70	53	9	33	17	16	18	26	57	
	79	59	10	52	20	27	19	30	60	
		63	32	55	23	29	22	66		
		75	36	56	35	37	31	72		
			45	58	39	41	38			
			49	62	40	42	43			
			61	65	46	50	67			
				68	54	51				
				73	64	77				
				76	69	78				
					71					
					80					

**TABLE No. 38**  
**Q-sort values assigned by Miss Damayanti Joshi**

	10	9	8	7	6	5	4	3	2	1	0
2	4	6	9	12	14	12	9	6	4	2	0
5	27	4	16	1	8	2	3	14	12	18	
6	45	7	17	23	10	9	29	28	25	44	
	49	21	26	24	13	11	30	36	43		
	63	40	32	34	19	15	46	47	77		
		48	35	54	20	41	50	67			
		51	37	57	22	53	52	76			
			39	58	31	59	60				
			42	62	33	61	66				
			56	64	38	65	74				
				68	55	69					
				73	71	70					
				80	75	72					
					78						
					79						

TABLE No. 39  
Q-sort values assigned by Shri Vijay Raghev Rao

	9	8	7	6	5	4	3	2	1	0
10										
2	4	6	9	12	14	12	9	6	4	2
19	45	5	7	6	1	3	18	29	12	22
27	52	16	10	17	2	8	25	54	41	69
	55	30	23	24	4	9	28	63	43	
	64	39	32	26	20	11	38	68	62	
		58	40	31	21	13	44	70		
		79	42	33	34	14	49	77		
			66	46	35	15	60			
			71	47	37	36	65			
			80	57	48	50	67			
				59	56	51				
				72	73	53				
				75	74	61				
					76					
					78					

TABLE No. 40  
 Q-sort values assigned by Prof. Jayant Narlikar

	9	8	7	6	5	4	3	2	1	0
10	4	6	9	12	14	12	9	6	4	2
2	17	1	9	5	11	3	12	31	4	26
40	37	2	16	23	14	10	13	33	36	60
64	57	6	27	24	20	15	25	68	49	
	76	7	35	32	21	18	28	70	67	
		8	45	39	48	19	30	72		
		71	51	42	50	22	38	73		
			58	43	54	29	44			
			59	46	55	34	62			
			75	47	56	41	77			
				52	61	53				
				66	63	69				
				80	65	79				
				74						
				78						





Data obtained from 38 creative persons shown in Tables 3 to 40 were correlated and the resulting correlation matrix was subjected to factor analysis by the Centroid Method with the help of computer at the Tata Institute of Fundamental Research, Bombay. The computer processed results are given below in Table No. 43.

Only four factors were extracted on the following consideration.

#### Criteria for Sufficient Factors

Fruchter (1954) has pointed out that "there are no exact criteria for stopping extraction of factors." He has mentioned that Vernon ( Vernon et al., 149 ) and Burt (1952) have listed some twentyfive criteria. It was decided to apply the Humphrey's Rule and the Coombs' Criterion for the purpose in the present investigation. Both these methods are being quoted below from Fruchter.

#### Humphrey's Rule

1. Find the product of the two highest loadings in a column of the centroid factor matrix.
2. Find the standard error of a correlation coefficient of zero, for the type of correlation and size of sample being

TABLE No. 43

Correlation Matrix and Centroid Factor Loadings of Q-data Obtained from 36 Creative Persons.

CORRELATION MATRIX

Table with 36 columns and 36 rows of correlation coefficients. The diagonal elements are all 1.000. The table shows a dense matrix of values ranging from approximately -0.468 to 0.999.

I FACTOR LOADINGS

Table with 36 columns and 2 rows of factor loadings for Factor I. Values range from 0.188 to 0.655.

RESIDUAL MATRIX

II FACTOR LOADINGS

Table with 36 columns and 2 rows of factor loadings for Factor II. Values range from -0.270 to 0.317.

RESIDUAL MATRIX

III FACTOR LOADINGS

Table with 36 columns and 2 rows of factor loadings for Factor III. Values range from -0.107 to 0.332.

RESIDUAL MATRIX

IV FACTOR LOADINGS

Table with 36 columns and 2 rows of factor loadings for Factor IV. Values range from -0.114 to 0.346.

RESIDUAL MATRIX

used ( e.g.,  $1/\sqrt{N}$  for the Pearson product-moment  $r$ ).

3. If the product found in step 1 above does not exceed twice the standard error found in step 2, the factor is probably not significant. This rule works best for samples that are not too large.

#### Coombs' Criterion

Count the number of negatives remaining in a table of residuals after reflection. If that number is not significantly different from the value of "C" obtained from the Coombs' Table ( 1941 ) for the number of variables, sufficient factors have been extracted. Fruchter has pointed out that this criterion is applicable only to analyses in which the table of correlations contains only positive or zero values. Small negatives are permissible.

In the present data, the size of the sample (N) was 80. Therefore the value  $1/\sqrt{N}$  was 0.11, which is the value of the standard error. Twice this value comes to 0.22. This calculation was done for applying the Humphrey's rule. Similarly, negatives were counted in the residual matrices for applying

the Coombs' Criterion. By applying both the methods, it appeared that only 2 or 3 factors should be extracted. The first factor itself took away most of the common variance.

A further test was applied to verify the position : the correlation matrix was subjected to Cluster Analysis, the results of which are given in Table No. 44.

On the basis of the aforesaid considerations, it was decided to retain four factors for further analysis.

#### Factor - Arrays

The factor-arrays for each factor were next calculated. According to Stephenson ( 1953, p. 120 ) this is an important procedure in Q-methodology. Thus to quote from Stephenson ( 1953 ) :

It consists of estimating the factor scores for each of the statements of a sample in standard terms. Thus there may be, say, ten variates, all differently loaded in a factor. The scores gained by a statement ... are added, giving greatest weight to those scores belonging to the variates with the largest loadings.

TABLE No. 44  
Work-sheet and Solution for B - Coefficients in Cluster Analysis

Preceding Cluster i	Sum of i with n variables	Sum of Correlations between i and variables in cluster i	Sum of Correlations among variables in cluster i	Sum of Correlations of variables in cluster i with preceding lines	k = Number of variables in the cluster	$\frac{k(k-1)}{2}$ = Number of Inter-correlations in cluster	$k(n-k)$ = Number of Remaining Inter-correlations	Mean of the i correlations (4) (7)	Mean of the i remaining Inter-correlations (5) (8)	B-Coefficient (9) (10)
1	2	3	4	5	6	7	8	9	10	11
B (13,27)	13,27 +15,21 =22,92	.63	.63	21.66	2	1	72	.630	.300	2.10
B (13,27,33)	11.98	.90	1.53	31.64	3	3	105	.510	.263	1.68
B (13,27,33,37)	12.21	1.49	3.02	41.07	4	6	136	.500	.301	1.66
B (13,27,33,37,3)	11.36	1.94	4.96	48.75	5	10	165	.496	.250	1.68
B (11,12)	10.57 +10.54 =21.11	.59	.58	20.53	2	1	72	.528	.296	1.78
B (11,12,38)	9.58	.95	1.53	28.58	3	3	105	.510	.272	1.87
B (11,12,38,26)	9.11	1.04	2.57	35.61	4	6	136	.425	.261	1.62
B (11,12,38,26,3)	8.45	1.52	4.09	41.02	5	10	165	.499	.248	1.64
B (21,31)	9.69 +11.11 =20.79	.58	.58	19.63	2	1	72	.580	.272	2.13
B (21,31,6)	10.52	.75	1.33	28.65	3	3	105	.443	.272	1.62
B (21,31,18,36)	10.65	1.37	2.70	36.56	4	6	136	.450	.268	1.67
B (9,34)	10.93 +10.44 =21.42	.57	.57	20.28	2	1	72	.570	.281	2.02
B (9,34,13)	8.42	.94	1.51	27.33	3	3	105	.503	.262	1.91
B (9,34,13,14)	9.99	1.24	2.75	34.04	4	6	136	.458	.256	1.78
B (9,34,13,14,28)	6.93	1.62	4.37	38.53	5	10	165	.437	.233	1.97
B (2,25)	8.19 + 8.74 =14.87	.41	.41	16.05	2	1	72	.410	.222	1.84
B (10,16)	7.43 + 7.07 =14.50	.44	.44	13.62	2	1	72	.440	.189	2.32
B (5,6)	6.33 + 9.90 =16.23	.38	.38	15.47	2	1	72	.380	.214	1.78
B (17,20)	7.18 +10.30 =17.48	.38	.38	16.72	2	1	72	.380	.232	1.63

Residuals : 1, 7, 8, 19, 22, 23, 24, 29, 30, 32, 35.

Stephenson has suggested that "weights" for the scores gained by any statement can be calculated by the following formula :

If  $f_a$  and  $f_b$  are the factor loadings for factor  $f$  in two variates  $a$  and  $b$ , respectively, the "weights" for the scores gained by any statement are in the following proportion :

$$\frac{w_b}{w_a} = \frac{f_b (1 - f_a^2)}{f_a (1 - f_b^2)}$$

The calculations for estimating the factor scores for each factor and the resulting factor-arrays are given in the following tables 45 to 61.

TABLE No. 45

First Factor Loadings and "Weighted" Factor Loadings.

Person :	Factor	Weighted :	Person :	Factor	Weighted
:	Loading	Factor :	:	Loading	Factor
:	:	Loading :	:	:	Loading
:	:	:	:	:	:
1	0.524	2.6	20	0.552	2.8
2	0.447	2.0	21	0.536	2.7
3	0.655	4.1	22	0.373	1.6
4	0.479	2.2	23	0.549	2.8
5	0.330	1.3	24	0.296	1.2
6	0.556	2.9	25	0.449	2.0
7	0.400	1.7	26	0.509	2.5
8	0.261	1.0	27	0.608	3.4
	(Base)				
9	0.597	3.3	28	0.385	1.6
10	0.407	1.7	29	0.406	1.7
11	0.599	3.3	30	0.409	1.8
12	0.594	3.2	31	0.614	3.5
13	0.500	2.4	32	0.262	1.0
14	0.565	3.0	33	0.651	4.1
15	0.659	3.6	34	0.585	3.2
16	0.404	1.7	35	0.050	*Omitted, being too low and insigni- -ficant.
17	0.387	1.6	36	0.600	3.4
18	0.596	3.3	37	0.690	4.7
19	0.518	2.5	38	0.567	3.0

\*Omitted, being too low and insignificant.

TABLE No. 46

Rank Orders of Statements According to "Weighted"  
Positive Factor Scores for Factor-I

State- ment No.	Factor Scores	Rank	State- ment No.	Factor Scores	Rank
1	496.8	47	21	601.3	67
2	562.8	62	22	350.1	11
3	399.2	30	23	599.9	65
4	509.6	49	24	506.0	48
5	619.2	69	25	273.9	4
6	664.2	74	26	424.7	35
7	689.4	78	27	680.4	76
8	487.8	45	28	248.1	3
9	486.8	44	29	355.3	12
10	359.2	13	30	594.3	64
11	344.5	9	31	415.4	33
12	231.6	2	32	649.0	73
13	381.1	24	33	559.5	60
14	378.8	22	34	471.1	40
15	360.6	14	35	561.2	61
16	674.8	75	36	370.1	18
17	536.1	54	37	600.9	66
18	363.5	15	38	347.0	10
19	517.4	51	39	493.1	46
20	450.1	38	40	515.3	50

State- -ment No.	Factor : Scores	: Rank	State- -ment No.	Factor : Scores	: Rank
41	396.6	29	61	403.3	31
42	636.7	72	62	372.4	20
43	294.1	5	63	415.7	34
44	365.5	17	64	693.3	79
45	687.9	77	65	436.3	36
46	371.3	19	66	373.4	21
47	545.7	56	67	393.4	28
48	484.3	43	68	388.2	27
49	378.9	23	69	364.4	16
50	484.0	42	70	337.8	8
51	624.3	71	71	547.5	58
52	523.9	53	72	385.0	25
53	413.5	32	73	460.9	39
54	303.3	6	74	309.8	7
55	619.3	70	75	539.7	55
56	546.5	57	76	437.1	37
57	732.9	80	77	214.1	1
58	605.7	68	78	574.6	63
59	522.8	52	79	557.7	59
60	385.4	26	80	480.3	41

TABLE No. 47  
FIRST FACTOR ARRAY

Statement No.	Statement	Category
57	I am optimistic	10
64	On confronting a problem relating to my area of work, I take it up as a challenge to my capabilities.	10
7	I feel that my own thinking guides me better than others' advice.	9
45	I am dedicated to my creative pursuit, even at the cost of health.	9
27	To me creative activity is compulsive and irresistible.	9
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	8
6	Whenever my creative work wins acclaim I feel immense satisfaction and joy.	8
32	I am curious to acquire new experiences.	8
42	I plan to attain my goal in a systematic way.	8

Statement : No.	Statement	: Category
51	I like to be realistic rather than idealistic.	8
55	I search for beauty in flowers, faces and things around.	8
5	My works will live beyond me; creative works are immortal.	8
58	I seize new things with enthusiasm.	
21	I have faith in that supernatural power which is guiding all universal activity.	
37	Creative ideas occur to me in sudden flashes.	
23	Anyone like me can attain his ambition if he really means to.	
30	I " keep going " with my creative pursuit only by virtue of some inner struggle.	
78	I follow the wise saying : " No risk no gain. "	
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
35	Creative pursuit soothes my feeling of frustration and inferiority.	

Statement: No.	Statement	Category
33	I become restless if I miss doing good to others.	
79	I inspire my fellowmen to realise exciting new possibilities.	
71	I don't care when people criticize my creative work.	
56	I am somehow successful in establishing the right social contacts.	
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	
75	I would rather pursue by arguing my point than simply yield by remaining silent.	
17	Very often I am lost in my imaginative ideas.	
52	My aim is concrete enjoyment, full actual living.	
59	To me a routine life, howsoever stable, tends to be simply monotonous.	
19	I continuously seek a change in my "inner life."	

Statement No.	Statement	Category
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some "blank" spells of experience.	
4	I believe that, in the long run, one must submit to fate.	
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	
8	I feel that I start my creative works slowly and with difficulty.	
9	I have a large number of creative ideas which I feel very difficult to execute.	
48	My moral codes forbid me to tolerate exceptions.	
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	

Statement No.	Statement	Category
80	Relaxing social constraints would perhaps augment creative expression.	
34	I desire to dominate over others, but at the same time also very much long to be loved by them.	
73	Many times new things, places and persons look rather familiar to me.	
20	I get fantastic ideas which seem to be more powerful than reality.	
76	People might be finding my creative work rather abstract/difficult to understand.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
26	I believe, I get some supernatural inspiration for my creative work.	
63	I can't help thinking that I am superior to most people in my field.	
31	Familiar things, places and persons often look very strange to me.	

Statement No.	Statement	Category
53	I enjoy more in social situations than in solitude.	
61	I am intrigued how people around are so very tactful.	
3	Unfamiliar things do not attract my attention at once.	
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
67	I demonstrate my feelings somewhat extravagantly as compared to most others.	
68	I feel that society is failing to give me my due recognition and respect.	
60	I take initiative or very active interest in constituting committees and starting institutions for the people's welfare.	
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	
13	I am unable to understand the fluctuations of my moods.	

Statement No.	Statement	Category
49	Most often I am lost in brooding over the past.	
14	I get perplexed but I can't tell it to others.	
66	For me the end justifies the means.	
62	The people whom I love do not actually deserve it.	
46	I feel that my lapses are sheerly due to short-sightedness.	
36	Somehow I can't control my impulses.	
44	My criticisms of others are sharp and damaging.	
69	I can't appreciate the charm of so-called "art."	
18	I am perhaps rough in my manners.	
15	In others' opinion I must be a whimsical person.	
10	I regard theories to be more important than facts.	

Statement No.	Statement	Category
29	I am perturbed by any criticism directed against me.	2
22	I wish that people realize that I come from a respectable family.	2
38	I can't understand why I am undervalued by the public.	2
11	I am quickly impressed by others.	2
70	I feel extremely nervous and exhausted even with mild troubles.	2
74	I find religion to be absurd superstition.	2
54	I am particular about dressing myself well.	1
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	1
25	Being mysterious, I am fascinating to members of the opposite sex.	1
28	I am somewhat afraid of the opposite sex. They are dangerous !	1

Statement No.	Statement	Category
12	I believe intoxicants stimulate creative ability.	0
77	Unknowingly I get "entangled" with unsuitable members of the other sex.	0

TABLE No. 48.

## Second Factor Loadings and "Weighted" Factor Loadings

Person	Factor Loading	Weighted Factor Loading	Person	Factor Loading	Weighted Factor Loading
1 X	0.148		20	0.258	1.1
2	0.270	1.2	21	0.350	1.6
3 X	0.041		22	-0.246	1.0
4	- 0.278	1.2	23 X	-0.158	
5 X	- 0.145		24 X	0.216	
6	- 0.317	1.4	25	0.266	1.2
7 X	0.167		26	-0.346	1.5
8	- 0.379	1.7	27 X	0.194	
9 X	0.183		28	-0.240	1.0
10	- 0.388	1.8	29	0.311	1.4
11	- 0.325	1.4	30 X	0.096	
12 X	- 0.076		31 X	0.187	
13 X	- 0.096		32 X	-0.049	
14	- 0.292	1.3	33	0.240	1.0
15	0.327	1.5	34 X	-0.071	
16 X	- 0.129		35	-0.504	2.7
17	0.231	1.0	36	0.251	1.1
Positive (Base)					
18	0.310	1.4	37 X	0.065	
19 X	0.128		38 X	-0.196	

X Omitted, being too low and insignificant.

TABLE No. 49

Rank orders of Statements according to "Weighted"  
Positive Factor Scores for Factor -II

State- -ment No.	Factor Scores	Rank	State- -ment No.	Factor Scores	Rank
1	63.9	45.5	21	105.6	80
2	66.2	50	22	58.3	33
3	52.5	25	23	73.5	57
4	83.6	70	24	61.8	39
5	93.3	75	25	35.4	6
6	81.2	65	26	98.3	78
7	93.1	74	27	93.7	76
8	51.6	24	28	32.0	4
9	56.1	31	29	48.0	19
10	46.5	16	30	88.6	72
11	38.3	8	31	44.0	12
12	31.5	3	32	82.9	69
13	55.7	30	33	72.2	55.5
14	46.2	15	34	66.3	51
15	33.1	5	35	81.5	66
16	91.0	73	36	50.9	22
17	72.2	55.5	37	94.0	77
18	48.4	20	38	49.9	21
19	74.9	58	39	71.9	54
20	64.5	48	40	63.8	44

State- ment No.	Factor Scores	Rank	State- ment No.	Factor Scores	Rank
41	53.8	27	61	51.0	23
42	69.2	53	62	47.3	18
43	35.5	7	63	64.0	47
44	45.5	14	64	75.2	59
45	86.7	71	65	54.1	28
46	41.2	11	66	46.7	17
47	63.9	45.5	67	54.7	29
48	76.5	60	68	62.8	41
49	60.2	37	69	58.0	32
50	79.5	63	70	39.6	9.5
51	77.9	62	71	67.7	52
52	62.4	40	72	59.3	34
53	53.5	26	73	60.9	38
54	39.6	9.5	74	15.1	1
55	82.0	67	75	59.7	35
56	77.0	61	76	59.8	36
57	98.4	79	77	29.3	2
58	82.3	68	78	80.1	64
59	63.1	42	79	64.7	49
60	44.6	13	80	63.4	43

TABLE No. 50

Rank Orders of Statements According to "Weighted"  
Negative Factor Scores for Factor-II

State- -ment No.	Factor : Scores	: Rank	State- -ment No.	Factor : Scores	: Rank
1	65.2	22	21	25.8	2
2	70.9	31	22	43.3	6
3	71.3	32	23	93.4	64
4	43.5	7	24	82.4	47
5	86.4	53	25	53.8	13
6	96.8	70	26	18.7	1
7	107.4	78	27	89.5	60
8	99.8	74	28	32.7	3
9	88.0	56	29	62.7	20
10	61.0	18	30	76.3	40
11	72.8	36	31	65.4	24
12	41.6	5	32	103.5	77
13	67.2	26	33	95.6	67
14	86.2	52	34	85.3	50
15	55.9	15	35	94.9	66
16	97.5	71	36	65.8	25
17	82.3	46	37	78.1	44
18	60.1	17	38	35.4	4
19	61.4	19	39	71.9	35
20	70.0	29	40	71.8	34

State- -ment No.	Factor : Scores	: Rank	: State- -ment No.	Factor : Scores	: Rank
41	64.1	22	61	82.2	45
42	93.2	63	62	73.2	37
43	49.3	11	63	71.6	33
44	86.8	54	64	112.9	80
45	110.6	79	65	83.2	48
46	67.5	27	66	46.5	9
47	100.7	75	67	73.6	38
48	70.8	30	68	48.2	10
49	68.3	28	69	55.1	14
50	77.1	42	70	90.6	62
51	96.4	68	71	86.9	55
52	88.2	57.5	72	52.7	12
53	88.6	59	73	74.5	39
54	63.4	21	74	98.4	72
55	85.3	51	75	99.2	73
56	83.3	49	76	56.0	16
57	94.7	65	77	45.5	8
58	89.9	61	78	88.2	57.5
59	101.6	76	79	96.6	69
60	76.6	41	80	77.5	43

TABLE No. 51  
 FACTOR ARRAY FOR FACTOR II ( POSITIVE )

Statement No.	Statement	: Category
21	I have faith in that supernatural power which is guiding all universal activity.	10
57	I am optimistic.	10
26	I believe, I get some supernatural inspiration for my creative work.	9
37	Creative ideas occur to me in sudden flashes.	9
27	To me creative activity is compulsive and irresistible.	9
5	My works will live beyond me; creative works are immortal.	9
7	I feel that my own thinking guides me better than others' advice.	8
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	8
30	I " keep going " with my creative pursuit only by virtue of some inner struggle.	8

Statement No.	Statement	Category
45	I am dedicated to my creative pursuit, even at the cost of health.	8
4	I believe that, in the long run, one must submit to fate.	8
32	I am curious to acquire new experiences.	8
58	I seize new things with enthusiasm.	
55	I search for beauty in flowers, faces and things around.	
35	Creative pursuit soothes my feeling of frustration and inferiority.	
6	Whenever my creative work wins acclaim, I feel immense satisfaction and joy.	
78	I follow the wise saying : " No risk no gain. "	
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	
51	I like to be realistic rather than idealistic.	

Statement No.	Statement	Category
56	I am somehow successful in establishing the right social contacts.	
48	My moral codes forbid me to tolerate exceptions.	
64	On confronting a problem relating to my area of work, I take it up as a challenge to my capabilities.	
19	I continuously seek a change in my "inner life."	
23	Anyone like me can attain his ambition if he really means to.	
33	I become restless if I miss doing good to others.	
17	Very often I am lost in my imaginative ideas.	
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	
42	I plan to attain my goal in a systematic way.	

Statement No.	Statement	: Category
71	I don't care when people criticize my creative work.	
34	I desire to dominate over others but at the same time also very much long to be loved by them.	
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
79	I inspire my fellowmen to realize exciting new possibilities.	
20	I get fantastic ideas which seem to be more powerful than reality.	
63	I can't help thinking that I am superior to most people in my field.	
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some "blank" spells of experience.	

Statement No.	Statement	Category
80	Relaxing social constraints would perhaps augment creative expression.	
59	To me a routine life, howsoever stable, tends to be simply monotonous.	
68	I feel that society is failing to give me my due recognition and respect.	
52	My aim is concrete enjoyment, full actual living.	
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
73	Many times new things, places and persons look rather familiar to me.	
49	Most often I am lost in brooding over the past.	
76	People might be finding my creative work rather abstract/difficult to understand.	
75	I would rather pursue by arguing my point than simply yield by remaining silent.	

Statement No.	Statement	Category
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	
22	I wish that people realize that I come from a respectable family.	
69	I can't appreciate the charm of so-called "art".	
9	I have a large number of creative ideas which I feel very difficult to execute.	
13	I am unable to understand the fluctuations of my moods.	
67	I demonstrate my feelings somewhat extravagantly as compared to most others.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
53	I enjoy more in social situations than in solitude.	

Statement No.	Statement	Category
3	Unfamiliar things do not attract my attention at once.	
8	I feel that I start my creative works slowly and with difficulty.	
61	I am intrigued how people around are so very tactful.	
36	Somehow I can't control my impulses.	
38	I can't understand why I am undervalued by the public.	
18	I am perhaps rough in my manners.	
29	I am perturbed by any criticism directed against me.	
62	The people whom I love do not actually deserve it.	
66	For me the end justifies the means.	
10	I regard theories to be more important than facts.	
14	I get perplexed but I can't tell it to others.	

Statement No.	Statement	Category
44	My criticisms of others are sharp and damaging.	
60	I take initiative or very active interest in constituting committees and starting institutions for the peoples' welfare.	
31	Familiar things, places and persons often look very strange to me.	2
46	I feel that my lapses are sheerly due to short-sightedness.	2
70	I feel extremely nervous and exhausted even with mild troubles.	2
54	I am particular about dressing myself well.	2
11	I am quickly impressed by others.	2
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	2
25	Being mysterious, I am fascinating to members of the opposite sex.	1
15	In others' opinion I must be a whimsical person.	1

Statement No.	Statement	Category
28	I am somewhat afraid of the opposite sex. They are dangerous !	1
12	I believe intoxicants stimulate creative ability.	1
77	Unknowingly I get " entangled " with unsuitable members of the other sex.	0
74	I find religion to be absurd superstition.	0

TABLE No. 52

## FACTOR ARRAY FOR FACTOR II ( NEGATIVE )

Statement No.	Statement	Category
64	On confronting a problem relating to my area of work, I take u it up as a challenge to my capabilities.	10
45	I am dedicated to my creative pursuit, even at the cost of health.	10
7	I feel that my own thinking guides me better than others' advice.	9
32	I am curious to acquire new experiences.	9
59	To me a routine life, howsoever stable, tends to be simply monotonous.	9
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	9
8	I feel that I start my creative works slowly and with difficulty.	8
75	I would rather pursue by arguing my point than simply yield by remaining silent.	8
74	I find religion to be absurd superstition.	8

Statement No.	Statement	Category
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	8
6	Whenever my creative work wins acclaim, I feel immense satisfaction and joy.	8
79	I inspire my fellowmen to realize exciting new possibilities.	8
51	I like to be realistic rather than idealistic.	
33	I become restless if I miss doing good to others.	
35	Creative pursuit soothes my feeling of frustration and inferiority.	
57	I am optimistic.	
23	Anyone like me can attain his ambition if he really means to.	
42	I plan to attain my goal in a systematic way.	
70	I feel extremely nervous and exhausted even with mild troubles.	

Statement No.	Statement	Category
58	I seize new things with enthusiasm.	
27	To me creative activity is compulsive and irresistible.	
53	I enjoy more in social situations than in solitude.	
78	I follow the wise saying : " No risk no gain."	
52	My aim is concrete enjoyment, full actual living.	
9	I have a large number of creative ideas which I feel very difficult to execute.	
71	I don't care when people criticize my creative work.	
44	My criticisms of others are sharp and damaging.	
5	My works will live beyond me creative works are immortal.	
14	I get perplexed but I can't tell it to others.	

Statement No.	Statement	Category
55	I search for beauty in flowers, faces and things around.	
34	I desire to dominate over others but at the same also very much long to be loved by them.	
56	I am somehow successful in establishing the right social contacts.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
17	Very often I am lost in my imaginative ideas.	
61	I am intrigued how people around are so very tactful.	
37	Creative ideas occur to me in sudden flashes.	
80	Relaxing social constraints would perhaps augment creative expression.	

Statement No.	Statement	: Category
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	
60	I take initiative or very active interest in constituting committees and starting institutions for the peoples' welfare.	
30	I " keep going " with my creative pursuit only by virtue of some inner struggle.	
73	Many times new things, places and persons look rather familiar to me.	
67	I demonstrate my feelings some- what extravagantly as compared to most others.	
62	The people whom I love do not actually deserve it.	
11	I am quickly impressed by others.	
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	

Statement No.	Statement	Category
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some "blank " spells of experience.	
63	I can't help thinking that I am superior to most people in my field.	
3	Unfamiliar things do not attract my attention at once.	
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
48	My moral codes forbid me to tolerate exceptions.	
20	I get fantastic ideas which seem to be more powerful than reality.	
49	Most often I am lost in brooding over the past.	
46	I feel that my lapses are sheerly due to short-sightedness.	
13	I am unable to understand the fluctuations of my moods.	
36	Somehow I can't control my impulses.	

Statement No.	Statement	: Category
31	Familiar things, places and persons often look very strange to me.	
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
54	I am particular about dressing myself well.	
29	I am perturbed by any criticism directed against me.	
19	I continuously seek a change in my "inner life."	
10	I regard theories to be more important than facts.	
18	I am perhaps rough in my manners.	
76	People might be finding my creative work rather abstract/difficult to understand.	

Statement No.	Statement	Category
15	In others' opinion I must be a whimsical person.	
69	I can't appreciate the charm of so-called "art."	
25	Being mysterious, I am fascinating to members of the opposite sex.	
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	2
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	2
68	I feel that society is failing to give me my due recognition and respect.	2
66	For me the end justifies the means.	2
77	Unknowingly I get "entangled" with unsuitable members of the other sex.	2
4	I believe that, in the long run, one must submit to fate.	2

Statement No.	Statement	Category
22	I wish that people realize that I come from a respectable family.	1
12	I believe intoxicants stimulate creative ability.	1
38	I can't understand why I am undervalued by the public.	1
28	I am somewhat afraid of the opposite sex. They are dangerous ;	1
21	I have faith in that supernatural power which is guiding all universal activity.	0
26	I believe, I get some supernatural inspiration for my creative work.	0

TABLE No. 53

Significant Third and Fourth Factor Loadings  
and the Corresponding Weighted  
Factor Loadings

<u>Plus III ( + )</u>			<u>Minus III ( - )</u>		
( 1 )	+ 0.232	1.00 (Base)	( 9 )	- 0.358	1.53
( 4 )	+ 0.329	1.51	( 13 )	- 0.465	2.21
( 8 )	+ 0.332	1.52	( 14 )	- 0.251	1.00 (Base)
( 12 )	+ 0.246	1.07	( 22 )	- 0.271	1.09
( 16 )	+ 0.303	1.36	( 28 )	- 0.457	2.16
( 23 )	+ 0.243	1.05	( 31 )	- 0.276	1.11
( 30 )	+ 0.275	1.21	( 34 )	- 0.319	1.32
		<u>IV</u>			<u>IV</u>
( 11 )	+ 0.281	1.05	( 5 )	- 0.511	2.78
( 12 )	+ 0.280	1.04	( 6 )	- 0.346	1.58
( 26 )	+ 0.283	1.06	( 33 )	- 0.235	1.00 (Base)
( 27 )	+ 0.386	1.56			
( 37 )	+ 0.269	1.00 (Base)			

TABLE No. 54

Rank Orders of Statements According to "Weighted"  
Positive Factor Scores for Factor-III

State- -ment No.	Factor : Scores	: Rank	State- -ment No.	Factor : Scores	: Rank
1	50.94	57	21	30.65	15
2	49.26	55	22	29.69	14
3	28.52	11	23	49.25	54
4	51.04	58	244	41.26	30.5
5	43.39	38	25	22.66	8
6	61.24	76	26	20.99	5
7	64.92	79	27	61.19	75
8	57.28	68	28	20.58	4
9	47.33	47	29	41.50	34
10	22.42	6	30	64.26	77
11	33.81	18	31	50.27	56
12	17.51	2	32	57.47	69
13	41.45	33	33	39.44	27
14	35.73	21	34	42.95	36
15	46.54	46	35	66.95	80
16	54.07	61	36	45.23	41
17	55.03	63	37	57.15	66
18	38.01	26	38	33.63	17
19	48.69	52	39	36.72	22
20	46.53	45	40	55.53	65

State- -ment No.	Factor Scores	Rank	State- -ment No.	Factor Scores	Rank
41	41.43	32	61	43.00	37
42	46.44	44	62	42.88	35
43	25.54	9	63	45.92	43
44	33.36	16	64	58.51	70
45	55.23	64	65	51.43	59
46	37.03	23	66	29.15	13
47	44.86	40	67	41.26	30.5
48	37.95	25	68	35.38	20
49	39.67	28	69	19.05	3
50	57.24	67	70	54.63	62
51	59.82	73	71	44.28	39
52	59.76	72	72	37.85	24
53	34.35	19	73	48.02	48
54	16.55	1	74	53.26	60
55	59.46	71	75	48.63	51
56	49.10	53	76	28.82	12
57	60.27	74	77	22.45	7
58	41.23	29	78	48.44	50
59	64.90	78	79	45.65	42
60	26.47	10	80	48.29	49

TABLE No. 55

Rank Orders of Statements according to " Weighted "  
Negative Factor Scores for Factor-III

State- -ment No.	Factor : Scores :	: : Rank :	State- -ment No.	Factor : Scores :	: : Rank :
1	51.61	44	21	63.41	55
2	58.72	53	22	48.44	40
3	52.51	48	23	75.98	72
4	54.52	50	24	66.94	59
5	52.06	47	25	35.14	15
6	79.24	75	26	28.94	3
7	83.60	77	27	70.53	67
8	68.20	62	28	36.32	17
9	48.02	37	29	36.01	16
10	29.61	4	30	47.31	34
11	48.26	38	31	36.96	18
12	42.98	26	32	69.92	66
13	38.89	22	33	73.65	70
14	41.49	25	34	45.08	27
15	34.78	14	35	45.98	30
16	74.13	71	36	45.61	28
17	47.23	33	37	51.64	45
18	51.95	46	38	33.83	13
19	32.44	8	39	47.21	32
20	31.19	6	40	27.61	2

State- ment No.	Factor Scores	Rank	State- ment No.	Factor Scores	Rank
41	45.75	29	61	48.36	39
42	77.46	73	62	46.28	31
43	37.50	20	63	37.79	21
44	66.98	61	64	83.68	78
45	83.44	76	65	54.23	49
46	39.71	23	66	49.99	41
47	78.65	74	67	60.57	54
48	47.86	35	68	37.04	19
49	33.57	11	69	56.83	51
50	32.83	10	70	32.53	9
51	85.63	79	71	71.86	68
52	58.30	52	72	31.80	7
53	63.59	56	73	50.13	42
54	39.97	24	74	19.97	1
55	65.01	57	75	69.55	65
56	65.61	58	76	50.38	43
57	86.46	80	77	30.93	5
58	71.89	69	78	68.97	64
59	33.65	12	79	66.97	60
60	68.85	63	80	47.95	36

TABLE No. 56

## FACTOR ARRAY FOR FACTOR III ( POSITIVE )

Statement: No.	Statement	: Category
35	Creative pursuit soothes my feeling of frustration and inferiority.	10
7	I feel that my own thinking guides me better than others' advice.	10
59	To me a routine life, howsoever stable, tends to be simply monotonous.	9
30	I " keep going " with my creative pursuit only by virtue of some inner struggle.	9
6	Whenever my creative work wins acclaim, I feel immense satisfaction and joy.	9
27	To me creative activity is compulsive and irresistible.	9
57	I am optimistic.	8
51	I like to be realistic rather than idealistic.	8
52	My aim is concrete enjoyment, full actual living.	8

Statement No. :	Statement :	Category :
55	I search for beauty in flowers, faces and things around.	8
64	On confronting a problem relating to my area of work, I take it up as a challenge to my capabilities.	8
32	I am curious to acquire new experiences.	8
8	I feel that I start my creative works slowly and with difficulty.	
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	
37	Creative ideas occur to me in sudden flashes.	
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some "blank" spells of experience.	
45	I am dedicated to my creative pursuit, even at the cost of health.	
17	Very often I am lost in my imaginative ideas.	
70	I feel extremely nervous and exhausted even with mild troubles.	

Statement No.	Statement	Category
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	
74	I find religion to be absurd superstition.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
4	I believe that, in the long run, one must submit to fate.	
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	
31	Familiar things, places and persons often look very strange to me.	
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
23	Anyone like me can attain his ambition if he really means to.	
56	I am somehow successful in establishing the right social contacts.	

Statement No.	Statement	Category
19	I continuously seek a change in my " inner life " !	
75	I would rather pursue by arguing my point than simply yield by remaining silent.	
78	I follow the wise saying : " No risk no gain. "	
80	Relaxing social constraints would perhaps augment creative expression.	
73	Many times new things, places and persons look rather familiar to me.	
9	I have a large number of creative ideas which I feel very difficult to execute.	
15	In others' opinion I must be a whimsical person.	
20	I get fantastic ideas which seem to be more powerful than reality.	
42	I plan to attain my goal in a systematic way.	
63	I can't help thinking that I am superior to most people in my field.	

Statement: No.	Statement	: Category
79	I inspire my fellowmen to realize exciting new possibilities.	
36	Somehow I can't control my impulses.	
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	
71	I don't care when people criticize my creative work.	
5	My works will live beyond me; creative works are immortal.	
61	I am intrigued how people around are so very tactful.	
34	I desire to dominate over others but at the same time also very much long to be loved by them.	
62	The people whom I love do not actually deserve it.	
29	I am perturbed by any criticism directed against me.	
13	I am unable to understand the fluctuations of my moods.	

Statement: No.	Statement	: Category
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
67	I demonstrate my feelings somewhat extravagantly as compared to most others.	
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
58	I seize new things with enthusiasm.	
49	Most often I am lost in brooding over the past.	
33	I become restless if I miss doing good to others.	
18	I am perhaps rough in my manners.	
48	My moral codes forbid me to tolerate exceptions.	
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	
46	I feel that my lapses are sheerly due to short-sightedness.	

Statement: No. :	Statement	: Category
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	
14	I get perplexed but I can't tell it to others.	
68	I feel that society is failing to give me my due recognition and respect.	
53	I enjoy more in social situations than in solitude.	
11	I am quickly impressed by others.	
38	I can't understand why I am undervalued by the public.	
44	My criticisms of others are sharp and damaging.	
21	I have faith in that supernatural power which is guiding all universal activity.	
22	I wish that people realize that I come from a respectable family.	
66	For me the end justifies the means.	
76	People might be finding my creative work rather abstract/difficult to understand.	2.

Statement No.	Statement	Category
3	Unfamiliar things do not attract my attention at once.	2
60	I take initiative or very active interest in constituting committees and starting institutions for the peoples' welfare.	2
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	2
25	Being mysterious, I am fascinating to members of the opposite sex.	2
77	Unknowingly I get "entangled" with unsuitable members of the other sex.	2
10	I regard theories to be more important than facts.	1
26	I believe, I get some supernatural inspiration for my creative work.	1
28	I am somewhat afraid of the opposite sex. They are dangerous !	1
69	I can't appreciate the charm of so-called "art."	1

Statement No.	Statement	Category
12	I believe intoxicants stimulate creative ability.	0
54	I am particular about dressing myself well.	0

TABLE No. 57

## FACTOR ARRAY FOR FACTOR III (NEGATIVE)

Statement No.	Statement	Category
57	I am optimistic.	10
51	I like to be realistic rather than idealistic.	10
64	On confronting a problem relating to my area of work, I take it up as a challenge to my capabilities.	9
7	I feel that my own thinking guides me better than others' advice.	9
45	I am dedicated to my creative pursuit, even at the cost of health.	9
6	Whenever my creative work wins acclaim, I feel immense satisfaction and joy.	9
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	8
42	I plan to attain my goal in a systematic way.	8
23	Anyone like me can attain his ambition if he really means to.	8

Statement No.	Statement	Category
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	8
33	I become restless if I miss doing good to others.	8
58	I seize new things with enthusiasm.	8
71	I don't care when people criticize my creative work.	
27	To me creative activity is compulsive and irresistible	
32	I am curious to acquire new experiences.	
75	I would rather pursue by arguing my point than simply yield by remaining silent.	
78	I follow the wise saying : " No risk no gain."	
60	I take initiative or very active interest in constituting committees and starting institutions for the peoples' welfare.	
8	I feel that I start my creative works slowly and with difficulty.	

Statement: No.	Statement	: Category
44	My criticisms of others are sharp and damaging.	
79	I inspire my fellowmen to realize exciting new possibilities.	
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
56	I am somehow successful in establishing the right social contacts.	
55	I search for beauty in flowers, faces and things around.	
53	I enjoy more in social situations than in solitude.	
21	I have faith in that supernatural power which is guiding all universal activity.	
67	I demonstrate my feelings somewhat extravagantly as compared to most others.	
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
52	My aim is concrete enjoyment, full actual living.	

Statement No. :	Statement :	Category :
69	I can't appreciate the charm of so-called "art."	
4	I believe that, in the long run, one must submit to fate.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
3	Unfamiliar things do not attract my attention at once.	
5	My works will live beyond me; creative works are immortal.	
18	I am perhaps rough in my manners.	
37	Creative ideas occur to me in sudden flashes.	
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	
76	People might be finding my creative work rather abstract/difficult to understand.	
73	Many times new things, places and persons look rather familiar to me.	

Statement: No. :	Statement	: Category
66	For me the end justifies the means.	
22	I wish that people realize that I come from a respectable family.	
61	I am intrigued how people around are so very tactful.	
11	I am quickly impressed by others.	
9	I have a large number of creative ideas which I feel very difficult to execute.	
80	Relaxing social constraints would perhaps augment creative expression.	
48	My moral codes forbid me to tolerate exceptions.	
30	I "keep going" with my creative pursuit only by virtue of some inner struggle.	
17	Very often I am lost in my imaginative ideas.	
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	

Statement No.	Statement	Category
62	The people whom I love do not actually deserve it.	
35	Creative pursuit soothes my feeling of frustration and inferiority.	
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
36	Somehow I can't control my impulses.	
34	I desire to dominate over others but at the same time also very much long to be loved by them.	
12	I believe intoxicants stimulate creative ability.	
14	I get perplexed but I can't tell it to others.	
54	I am particular about dressing myself well.	
46	I feel that my lapses are sheerly due to short-sightedness.	
13	I am unable to understand the fluctuations of my moods.	

Statement No.	Statement	Category
63	I can't help thinking that I am superior to most people in my field.	
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	
68	I feel that society is failing to give me my due recognition and respect.	
31	Familiar things, places and persons often look very strange to me.	
28	I am somewhat afraid of the opposite sex. They are dangerous !	
29	I am perturbed by any criticism directed against me.	
25	Being mysterious, I am fascinating to members of the opposite sex.	
15	In others' opinion, I must be a whimsical person.	
38	I can't understand why I am undervalued by the public.	

Statement No. :	Statement :	Category :
59	To me a routine life, howsoever stable, tends to be simply monotonous.	2
49	Most often I am lost in brooding over the past.	2
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	2
70	I feel extremely nervous and exhausted even with mild troubles.	2
19	I continuously seek a change in my " inner life. "	2
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	2
20	I get fantastic ideas which seem to be more powerful than reality.	1
77	Unknowingly I get " entangled " with unsuitable members of the other sex.	1
10	I regard theories to be more important than facts.	1
26	I believe, I get some supernatural inspiration for my creative work.	1

Statement No.	Statement	Category
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some "blank" spells of experience.	0
74	I find religion to be absurd superstition.	0

TABLE No. 58

Rank Orders of Statements According to "Weighted"  
Positive Factor Scores for Factor - IV

State- -ment No.	Factor : Scores	: Rank	: State- -ment No.	: Factor : Scores	: Rank
1	29.58	44	21	28.46	42
2	40.06	68	22	12.52	4
3	22.28	23	23	38.42	63
4	24.29	31	24	34.79	56
5	35.80	58	25	16.63	9
6	37.93	61	26	17.96	12
7	44.67	77	27	41.87	72
8	40.64	70	28	15.57	7
9	38.07	62	29	18.74	16
10	25.31	35	30	38.83	66
11	22.87	26	31	33.22	52
12	10.98	3	32	43.13	74
13	19.20	19	33	31.12	47
14	25.42	37	34	18.13	13.5
15	27.53	41	35	34.25	54
16	44.61	76	36	18.65	15
17	31.15	48	37	30.64	46
18	24.48	33	38	19.16	18
19	42.41	73	39	30.51	45
20	32.26	50	40	44.68	78

State- -ment No.	Factor : Scores	: Rank	: State- -ment No.	Factor : Scores	: Rank
41	18.84	17	61	24.42	32
42	43.15	75	62	19.86	20
43	9.40	2	63	17.66	11
44	22.40	24	64	47.24	79
45	49.79	80	65	31.22	49
46	23.29	28	66	22.72	25
47	38.98	67	67	15.01	6
48	29.00	43	68	23.43	29
49	23.95	30	69	21.95	22
50	25.46	38	70	21.93	21
51	26.51	40	71	40.99	71
52	25.78	39	72	24.88	34
53	18.13	13.5	73	25.40	36
54	12.53	5	74	16.01	8
55	32.58	51	75	38.47	65
56	17.05	10	76	33.24	53
57	36.89	59	77	9.32	1
58	40.45	69	78	34.30	55
59	38.46	64	79	37.30	60
60	22.91	27	80	35.25	57

TABLE No. 59

Rank Orders of Statements according to "Weighted"  
Negative Factor Scores for Factor- IV

State- -ment No.	Factor : Scores	: Rank	State- -ment No.	Factor : Scores	: Rank
1	37.72	70	21	24.66	31
2	30.96	54	22	15.92	13
3	37.10	67	23	35.94	64
4	40.70	76	24	19.86	20.5
5	30.96	54	25	13.30	11
6	43.50	79	26	23.44	28
7	39.90	74	27	34.36	59
8	21.64	24	28	12.72	10
9	28.20	42	29	34.18	58
10	19.86	20.5	30	25.64	35
11	26.80	38.5	31	25.22	32.5
12	20.44	22	32	39.14	72
13	24.22	29	33	35.52	62
14	27.00	40	34	30.96	54
15	9.14	4	35	28.42	44
16	30.38	51.5	36	16.28	15
17	32.96	57	37	34.74	60
18	4.16	1	38	7.56	2
19	28.22	43	39	26.00	36
20	21.86	25	40	26.02	37

State- -ment No.	Factor : Scores	: Rank	State- -ment No.	Factor : Scores	: Rank
41	30.36	50	61	25.22	32.5
42	41.68	77	62	19.24	18
43	8.94	3	63	21.42	23
44	13.84	12	64	40.68	75
45	24.40	30	65	19.82	19
46	26.80	38.5	66	10.92	5
47	11.90	7	67	28.76	47
48	18.46	16	68	12.12	9
49	18.66	17	69	28.78	48
50	32.16	56	70	25.42	34
51	43.04	78	71	22.60	26
52	39.50	73	72	29.00	49
53	37.66	69	73	36.72	65
54	28.58	45.5	74	35.88	63
55	35.16	61	75	16.26	14
56	50.02	80	76	11.92	8
57	36.92	66	77	11.72	6
58	30.38	51.5	78	23.24	27
59	38.14	71	79	37.32	68
60	27.18	41	80	28.58	45.5

TABLE No. 60

## FACTOR ARRAY FOR FACTOR IV ( POSITIVE )

Statement No.	Statement	Category
45	I am dedicated to my creative pursuit, even at the cost of health.	10
64	On confronting a problem relating to my area of work, I take it up as a challenge to my capabilities.	10
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some " blank " spells of experience.	9
7	I feel that my own thinking guides me better than others' advice.	9
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	9
42	I plan to attain my goal in a systematic way.	9
32	I am curious to acquire new experiences.	8
19	I continuously seek a change in my " inner life. "	8

Statement No.	Statement	Category
27	To me creative activity is compulsive and irresistible.	8
71	I don't care when people criticize my creative work.	8
8	I feel that I start my creative works slowly and with difficulty.	8
58	I seize new things with enthusiasm.	8
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	
30	I "keep going" with my creative pursuit only by virtue of some inner struggle.	
75	I would rather pursue by arguing my point than simply yield by remaining silent.	
59	To me a routine life, howsoever stable, tends to be simply monotonous.	
23	Anyone like me can attain his ambition if he really means to	

Statement No.	Statement	Category
9	I have a large number of creative ideas which I feel very difficult to execute.	
6	Whenever my creative work wins acclaim, I feel immense satisfaction and joy.	
79	I inspire my fellowmen to realize exciting new possibilities.	
57	I am optimistic.	
5	My works will live beyond me; creative works are immortal.	
80	Relaxing social constraints would perhaps augment creative expression.	
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
78	I follow the wise saying : " No risk no gain. "	
35	Creative pursuit soothes my feeling of frustration and inferiority.	
76	People might be finding my creative work rather abstract/ difficult to understand.	

Statement No.	Statement	: Category
31	Familiar things, places and persons often look very strange to me.	
55	I search for beauty in flowers, faces and things around.	
20	I get fantastic ideas which seem to be more powerful than reality.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
17	Very often I am lost in my imaginative ideas.	
33	I become restless if I miss doing good to others.	
37	Creative ideas occur to me in sudden flashes.	
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	

Statement No.	Statement	Category
48	My moral codes forbid me to tolerate exceptions.	
21	I have faith in that super-natural power which is guiding all universal activity.	
15	In others' opinion I must be a whimsical person.	
51	I like to be realistic rather than idealistic.	
52	My aim is concrete enjoyment, full actual living.	
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	
14	I get perplexed but I can't tell it to others.	
73	Many times new things, places and persons look rather familiar to me.	
10	I regard theories to be more important than facts.	
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	
18	I am perhaps rough in my manners.	

Statement No.	Statement	Category
61	I am intrigued how people around are so very tactful.	
4	I believe that, in the long run, one must submit to fate.	
49	Most often I am lost in brooding over the past.	
68	I feel that society is failing to give me my due recognition and respect.	
46	I feel that my lapses are sheerly due to short-sightedness.	
60	I take initiative or very active interest in constituting committees and starting institutions for the peoples' welfare.	
11	I am quickly impressed by others.	
66	For me the end justifies the means.	
44	My criticisms of others are sharp and damaging.	
3	Unfamiliar things do not attract my attention at once.	
69	I can't appreciate the charm of so-called "art."	

Statement No.	Statement	Category
70	I feel extremely nervous and exhausted even with mild troubles.	
62	The people whom I love do not actually deserve it.	
13	I am unable to understand the fluctuations of my moods.	
38	I can't understand why I am undervalued by the public.	
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
29	I am perturbed by any criticism directed against me.	
36	Somehow I can't control my impulses.	
34	I desire to dominate over others but at the same time also very much long to be loved by them.	
53	I enjoy more in social situations than in solitude.	
26	I believe, I get some super-natural inspiration for my creative work.	2
63	I can't help thinking that I am superior to most people in my field.	2

Statement No.	Statement	Category
56	I am somehow successful in establishing the right social contacts.	2
25	Being mysterious, I am fascinating to members of the opposite sex.	2
74	I find religion to be absurd superstition.	2
28	I am somewhat afraid of the opposite sex. They are dangerous !	2
67	I demonstrate my feelings somewhat extravagantly as compared to most others.	1
54	I am particular about dressing myself well.	1
22	I wish that people realize that I come from a respectable family.	1
12	I believe intoxicants stimulate creative ability.	1
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	0
77	Unknowingly I get "entangled" with unsuitable members of the other sex.	0

TABLE No. 61

## FACTOR ARRAY FOR FACTOR IV ( NEGATIVE )

Statement No.	Statement	Category
56	I am somehow successful in establishing the right social contacts.	10
6	Whenever my creative work wins acclaim, I feel immense satisfaction and joy.	10
51	I like to be realistic rather than idealistic.	9
42	I plan to attain my goal in a systematic way.	9
4	I believe that, in the long run, one must submit to fate.	9
64	On confronting a problem relating to my area of work, I take it up as a challenge to my capabilities.	9
7	I feel that my own thinking guides me better than others' advice.	8
52	My aim is concrete enjoyment, full actual living.	8
32	I am curious to acquire new experiences.	8

Statement No. :	Statement	: Category
59	To me a routine life, howsoever stable, tends to be simply monotonous.	8
1	In social situations I prefer to remain silent in order to keep my thoughts and feelings to myself.	8
53	I enjoy more in social situations than in solitude.	8
79	I inspire my fellowmen to realize exciting new possibilities.	
3	Unfamiliar things do not attract my attention at once.	
57	I am optimistic.	
73	Many times new things, places and persons look rather familiar to me.	
23	Anyone like me can attain his ambition if he really means to	
74	I find religion to be absurd superstition.	
33	I become restless if I miss doing good to others.	
55	I search for beauty in flowers, faces and things around.	

Statement No.	Statement	Category
37	Creative ideas occur to me in sudden flashes.	
27	To me creative activity is compulsive and irresistible.	
29	I am perturbed by any criticism directed against me.	
17	Very often I am lost in my imaginative ideas.	
50	Whenever there is a tussle between my thoughts and feelings, my feelings dominate.	
2	Generally I feel very much relaxed and comfortable, quite unnoticed by others.	
34	I desire to dominate over others but at the same time also very much long to be loved by them.	
5	My works will live beyond me; creative works are immortal.	
58	I seize new things with enthusiasm.	
16	Whenever novel and creative ideas occur to me I pursue them courageously, whatever the consequences.	

Statement: No. :	Statement	: Category
41	Many times I try to look sympathetic or enthusiastic even though there is no such genuine feeling in me.	
72	I have somewhat strange sensations like seeing colour-patterns when music is played.	
69	I can't appreciate the charm of so-called " art. "	
67	I demonstrate my feelings somewhat extravagantly as compared to most others.	
80	Relaxing social constraints would perhaps augment creative expression.	
54	I am particular about dressing myself well.	
35	Creative pursuit soothes my feeling of frustration and inferiority.	
19	I continuously seek a change in my " inner life. "	
9	I have a large number of creative ideas which I feel very difficult to execute.	
60	I take initiative or very active interest in constituting committees and starting institutions for the peoples' welfare.	

Statement No. :	Statement :	Category :
14	I get perplexed but I can't tell it to others.	
46	I feel that my lapses are sheerly due to short-sightedness.	
11	I am quickly impressed by others.	
40	Before the occurrence of a creative idea I have usually withdrawn into solitude and have had some "blank" spells of experience.	
39	Curiously enough, I can sense in advance the success or failure of my creative product or performance.	
30	I "keep going" with my creative pursuit only by virtue of some inner struggle.	
70	I feel extremely nervous and exhausted even with mild troubles.	
61	I am intrigued how people around are so very tactful.	
31	Familiar things, places and persons often look very strange to me.	
21	I have faith in that supernatural power which is guiding all universal activity.	

Statement: No.	Statement	: Category
45	I am dedicated to my creative pursuit, even at the cost of health.	
13	I am unable to understand the fluctuations of my moods.	
26	I believe, I get some supernatural inspiration for my creative work.	
78	I follow the wise saying : " No risk no gain."	
71	I don't care when people criticise my creative work.	
20	I get fantastic ideas which seem to be more powerful than reality.	
8	I feel that I start my creative works slowly and with difficulty.	
63	I can't help thinking that I am superior to most people in my field.	
12	I believe intoxicants stimulate creative ability.	
10	I regard theories to be more important than facts.	

Statement: No.	Statement	: Category
24	I can't stop my scheme or activity merely under the apprehension that it might hurt someone.	
65	Although I can establish excellent relations with those around me, yet I hurt their feelings because of my tactlessness.	
62	The people whom I love do not actually deserve it.	
49	Most often I am lost in brooding over the past.	
48	My moral codes forbid me to tolerate exceptions.	
36	Somehow I can't control my impulses.	
75	I would rather pursue by arguing my point than simply yield by remaining silent.	
22	I wish that people realize that I come from a respectable family.	
44	My criticisms of others are sharp and damaging.	2
25	Being mysterious, I am fascinating to members of the opposite sex.	2

Statement: No. :	Statement	: Category
28	I am somewhat afraid of the opposite sex. They are dangerous !	2
68	I feel that society is failing to give me my due recognition and respect.	2
76	People might be finding my creative work rather abstract/difficult to understand.	2
47	I call a spade a spade even if this makes me appear rather too plainspeaking.	2
77	Unknowingly I get " entangled " with unsuitable members of the other sex.	1
66	For me the end justifies the means.	1
15	In others' opinion I must be a whimsical person.	1
43	I do not see any wrong in being a little flexible about honesty in order to achieve one's goal.	1
38	I can't understand why I am undervalued by the public.	0
18	I am perhaps rough in my manners.	0

For interpreting the factor-arrays Stephenson (1953, p. 174 ) offers the following suggestion :

Factor-arrays consist of all the statements or the like of a Q-technique sample, arrayed in rank order of their factor scores. The statement which gains the highest score for a factor is placed at the head of the list and that scoring least is placed at the bottom. In this way all the statements are laid before us ; we can then look them over, much as we might look down a list of the names of students who have been ranked in order of their achievement at school ....

The virtue with factor-array for any factor is that " it consists of a Q - sort that a person could have given with the same result as all those persons\* who might have significant scores in that factor would have given " in the aggregate or on the average - the average being a weighted one. " Stephenson has made the assertion that " it has the property that each of the variates will correlate with it by an amount equal to its factor loading with the factor " .

Identification of the Factors and their Description :

A close look at the most characteristic statements for each factor i.e. the top three or four categories of each factor-array suggests the identification and description of the factors. A look at the bottom three or four categories is helpful in proper identification of each factor. Following this rule the identification and description of each of the four factors arrived at are given below :

The First Factor :

This factor represents characteristic description of all the creative persons studied with the exception of one. The following factor-description emerges, viz. :

Rational optimism, high ego-strength, realistic and healthy attitude towards life ( emotional stability ), openness to experience, dedicated persistence, sense of worth, assertive self-confidence and tendency for self-actualization.

The aforesaid description comes close to stable and venturesome (parmia) personality factors described in the personality theory of Cattell. This factor is unipolar, all values being positive. At the least characteristic - ( negative ) end are statements describing neurotic characteristics which confirms the

proposition that these persons are emotionally stable and they have healthy attitude towards life, possessing adequate sense of self-worth. A perusal of the statements made by the creative persons about the governing philosophy for their creative pursuits given in Appendix - Q seems to support the inference. The factor characterises ambiversion.

The Second Factor :

Unlike the first factor, this factor is bipolar in nature. Ten persons represent the positive side while nine persons represent the negative side of this factor. The positive factor - description emerges as follows :

Religious dedication, religious mystical, fatalistic, faith in supernatural power and self-abnegation. This part is comparable with Cattell's " Imaginative " ( autia ) factor.

The negative array of this factor may be described as follows :

Practical, non-religious, outspoken, self-confident ( faith in self as opposed to faith in super-natural power). This part compares well with Cattell's " Practical " ( praxernia ) factor.

The statements made by the representative creative persons of this factor about the guiding

philosophies for their creative pursuits seem to support the inference.

The Third Factor :

Like the second factor, this factor is also bipolar. Seven persons represent the positive end while an equal number of persons represent the negative end of this factor. The following positive factor - description seems apparent :

Mystical-intuitive guided by the unconscious inner self. This characterises introvert feeling type of personality.

The negative end seems to characterise the following attributes :

Non-mystical, industrious, exerting, extravert thinking type.

The statements made by the representative creative persons of this factor about their guiding philosophies seem to support the above inference that they are dedicatedly industrious persons charged with a high sense of duty.

The Fourth Factor :

Again, like the second and the third factors,

the fourth factor is also bipolar. Five creative persons represent the positive end of the factor while three persons represent its negative end. The positive end of the factor may be described by the following characteristics :

Urge for self-expression, openness to experience or extensibility ( Roger's description ), flexible value-orientation. The tendency is introvertive intuitive. This may be compared with Cattell's " self-sufficiency" factor.

Likewise, the negative array may be interpreted as composed of the following attributes :

Fixed value-orientation, methodical, social, extravert sensational type. This may be compared with Cattell's " group-tied " (group-adherence ) factor.

The statements made by the representative creative persons of this factor relating to their guiding philosophies seem to substantiate the above description.

#### Inferences in Terms of the Postulates :

Postulate No. 1 : Every creative field has its own characteristic dimension-pattern.

Finding : This proposition is not borne out in this investigation. No factor describes a pure area like fine arts, science, literature or

performing art. This finding agrees with the finding of the famous Berkeley Studies that "there is no clear stereotype of the creative individual," (Vervain, 1962) even though Factor I - which is descriptive of an ambivert phenomenon - is perhaps the stereotype of the creative individual which emerges in this study.

Postulate No. 2 : In general, creative persons are introvert.

Finding : This proposition is not substantiated in this investigation. Factor-I, which has most of the common variance, suggests ambivert characteristic. We find both extroverts and introverts amongst the creative persons as reflected in the bipolar Factors II, III and IV extracted in this study.

Postulate No. 3 : Specifically speaking, the creative persons:

- i) are curious to know new things;
- ii) are more feeling and intuitive type ;
- iii) are aesthetic in taste ;
- iv) believe in supernatural powers;
- v) have feeling of superiority;
- vi) have mysterious experiences ;
- vii) are irritable ;

Finding : Proposition 3(i) is amply substantiated as openness to experience and curiosity to acquire new experiences is characteristic of almost all of the creative persons included in this study.

Proposition 3(ii) is partly supported and it holds good for a significant number of the creative persons.

Proposition 3(iii) as revealed from the positions of statement numbers 55 and 69 in the four factor-arrays is sufficiently established.

Proposition 3(iv) is very much substantiated in respect of persons having high Factor II loading. In others it is not so very evident.

Proposition 3(v) is not substantiated generally. However, from the position of statement number 5, 34, 60 and 63 in the sorts of a few of them, it is revealed that they have high self esteem.

Proposition (vi) does not hold good generally but it is evident in case of creative persons having high loadings in Factors II and III although the sources of mysterious experiences are different : they might be supernatural inspiration in one case while in the other they may be traceable in the debris of the unconscious.

Proposition (vii) could not be ascertained by the Q-sort cards except perhaps by the position of statement No. 18 in the factor - arrays or in the individual Q-sorts. It is revealed that creative persons are generally very polite and mild-mannered persons. In a couple of cases, and that too in the initial stage of contact, this investigator found from his personal experience

their propensity to be somewhat irritable because of preoccupation with their own work. Subsequently, however, even these seemingly exceptions proved to be very polite, cooperating and good natured persons after the initial resistance.

- Postulate No. 4 : Creative persons of the verbal category are distinguishable from those of the non-verbal category in respect of personality characteristics.
- Finding : This proposition was not supported by this factor-analytic study.
- Postulate No. 5 : Creative persons of the verbal category have similar personality patterns amongst themselves.
- Finding : This proposition was also not supported from the factor-analytic study of the self-psychologies of the creative persons. A blend of various factors appears in all of them in differing proportions and with remarkable inconsistency-regardless of the area of creative pursuit.
- Postulate No. 6 : Creative persons of the non-verbal category have similar personality patterns among themselves.
- Finding : Inference drawn in respect of Postulate No. 5 is also applicable in respect of this postulate also.

In this context it may be pertinent to refer to Maslow (1954) who had studied distinguished persons, both historical figures and contemporary American

personalities, such as Whitman, Thoreau, Beethoven, Lincoln, Einstein, Spinoza, Eleanor Roosevelt, Albert Schweitzer and Fritz Kreisler. Maslow's analysis revealed the self-actualization characteristics of those eminent persons in the following form :-

1. they demonstrate an efficient perception of reality and acceptance of it ;
2. they accept themselves and others;
3. they show a high degree of spontaneity ;
4. they have a problem-centred orientation to life rather than a self-centred orientation;
5. such individuals have a need for privacy and detachment ;
6. they are autonomous or relatively independent of their environments ;
7. they appreciate the " basic goods of life " with continued freshness and pleasure;
8. they show, at times, profound mysticism;
9. they are able to identify with mankind ;
10. they develop deep interpersonal relations with others ;
11. they are democratic ;
12. they keep means and ends distinguishable;

13. they possess a well-developed and unhostile sense of humour ;
14. they are creative ; and
15. they tend to be non-conformists.

It will be seen that the findings of the present investigation are congruent with some of the above mentioned conclusions derived by Maslow in his own studies of creative personalities.

In every research report it is customary to offer suggestions for further study. While such suggestion cannot be regarded as very exhaustive and complete, an attempt has been made to list some topics of most immediate interest to this investigator hereunder :

#### Suggestions for further study

1. A replication study with another similar set of statements of the same design may be undertaken on the same or comparable group of creative persons.
2. A similar investigation may be made on research scholars ( who have chosen creative pursuit ) of various disciplines or on a promising group of young creative persons,

and the findings of this study compared with those of the proposed studies.

3. A Q-study may be undertaken on the lines of the Berkeley Studies with the help of expert observers, and the results of that study may be compared with those of this investigation which is limited to the self-psychology of the creative persons.
4. A historiometric study of creative persons, including those covered by the present investigation, may be undertaken to supplement the present investigation.
5. Replicative studies may be undertaken in other parts of the country.
6. The findings of the present investigation may be tested by undertaking studies employing other projective techniques.

Finally, it may be pertinent to mention here what Thompson and Debold ( 1971, pp. 412 and 413 ) have commented about the prevailing educational structure which is hampering the growth of ' one of the most highly valued of human characteristics ( Getzels and Jackson, 1962 )':

•••There are indications that our whole

educational structure not only is unable to assess creativity but actually is biased against it. Most teachers do not care much for the unusual, " offbeat " child who gives answers that do not conform to some predetermined idea of what is " correct."

They have highlighted this irony of fate further in the following words :

... one of the criticisms directed against tests such as the college boards is that they seem to penalize the creative person who is able to see in a question ambiguities that are not obvious to a more conventionally minded person and were perhaps not even obvious to the person who made up the test in the first place. Consequently, there is a great need to extend the concept we have of " giftedness " or " intellectual ability " so as to take in some factor of creativity whose fruits in art, literature, music, and science we know well and value but whose workings we do not know much about.

In conclusion this investigator would like to record here that no pretence is made in this research to impress that the Q-technique and the Q-methodology can be always dependable as the choicest approach for assessing adult creativity. In this context this investigator is tempted to quote Jung ( 1923, p. 56 ) who has emphatically decried dogmatic notions about the superiority of any single approach to psychological principles in these words :

The assumption that there exists only one psychology or only one fundamental psychological principle is an intolerable tyranny, belonging to the pseudo-scientific prejudice of the normal man. People are always speaking of the man and of his 'psychology', which is invariably traced back to the 'nothing else but'. In the same way one always talks of the reality, as though there were only one. Reality is that which works in a human soul and not that which certain people assume to be operative, and about which prejudiced generalizations are wont to be made. Moreover, however scientifically such generalizations may be advanced, it must not be forgotten that science is not the summa of life, that it is indeed only one of the psychological attitudes, only one of the forms of human thought.